

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A digital telecommunication system comprising:
a first centre configured to enable speech communication between a plurality of terminals, the first centre being associated with a calling terminal and including a first transcoder unit;
a second centre that is configured to enable speech communication between a plurality of terminals, the second centre being associated with a called terminal and including a second transcoder unit,
wherein the first and second transcoder units each include speech codecs and each of the terminals comprises one or more speech codecs, each including an encoder unit and a decoder unit, the terminals being arranged to provide information regarding the supported one or more speech codecs to their associated switching centres;
the first centre is configured to perform handshaking with the second centre, the handshaking including indication of the speech codecs supported by the calling terminal, wherein at least one of the first and second centres is configured to choose the speech codec used commonly by the calling and called terminals, and wherein at least one of the first and second centres is configured to establish call connections that bypass one or more of the transcoder units or to control the transcoder units to transmit encoded speech between the called and calling terminals without performing speech encoding operations so that speech is encoded and decoded only in the terminals.
2. (Previously Presented) The telecommunication system of claim 1, wherein the telecommunication system is a mobile communication system in which the terminals include mobile stations, and the telecommunication system further comprises a mobile communication network and at least one of the first and second centres is a mobile switching centre.

3. (Previously Presented) The telecommunication system of claim 2, wherein:
the mobile switching centre includes a subscriber database configured to maintain
subscriber data associated with a mobile subscriber, and the subscriber data includes
information indicating the speech codecs supported by a mobile station associated with the
mobile subscriber.

4. (Previously Presented) The telecommunication system of claim 1, wherein the
handshaking is performed as outband signalling.

5. (Previously Presented) The telecommunication system of claim 4, wherein the
first and second centres are configured to perform the handshaking in association with a
routing information inquiry issued in response to a determination that the called terminal is a
mobile subscriber.

6. (Previously Presented) The telecommunication system of claim 5, wherein:
the first centre is configured to send the routing information inquiry including
information associated with the speech codecs supported by the calling terminal,
the second centre is configured to select a speech codec to be associated with the call
connection which the calling and called terminals are configured to support, and
the second centre is configured to send information associated with the speech codec
associated with the call connection in a reply message to the routing information inquiry.

7. (Previously Presented) The telecommunication system of claim 6, wherein the
routing information inquiry and reply message to the routing information inquiry are
configured to pass via a home database of the called terminal.

8. (Previously Presented) The telecommunication system of claim 4, wherein the
first and second centres are configured to perform the handshaking in association with inter-
MSC signalling.

9. (Previously Presented) The telecommunication system of claim 8, wherein:

the first centre is configured to send a message requesting connection set-up, the message including information indicating the speech codecs supported by the calling terminal,

the second centre is configured to select a speech codec associated with the call connection which both the called and calling terminals are configured to support, and

the second centre is configured to send information associated with the codec associated with the call connection, in a reply message to the connection set-up message.

10. (Previously Presented) The telecommunication system of claim 1, wherein, when required, at least one of the first and second centres is configured to notify the associated terminal of the speech codec it has to use as the result of the handshaking.

11. (Previously Presented) The telecommunication system of claim 10, wherein at least one of the first and second centres is configured to notify the associated terminal of the speech codec to be used if it is not a default speech codec of the associated terminal.

12. (Previously Presented) The telecommunication system of claim 1, wherein: a pulse code modulated digital link exists between the first and second centres, and the first and second centres are configured to control their respective transcoder units to adapt an encoded speech signal to one or more least significant bits of PCM samples without transcoding.

13. (Previously Presented) The telecommunication system of claim 1, wherein: the system is configured to support a packet-switched link between the first and second centres, and the first and second centres are configured to connect a call connection that bypasses at least one of the transcoder units.

14. (Currently Amended) A centre in a digital telecommunication network configured to receive information regarding supported one or more speech codecs of a calling terminal, each speech codec including an encoder unit and a decoder unit, and connect a transcoder located in a transcoder unit to a call connection when required, wherein:

the centre is configured to perform handshaking with another centre associated with a called terminal, the handshaking including indication of speech codecs supported by the calling terminal associated with the centre, the centre also being configured to choose the speech codec commonly used by the terminals, and

the centre is configured to connect a call connection that bypasses the transcoder unit or to control the transcoder unit to transmit the encoded speech without performing speech encoding operations in such a way that speech encoding and decoding are only performed in the calling or called terminal.

15. (Previously Presented) The telecommunication system of claim 8, wherein the inter-MSC signalling is ISUP signalling.

16. (Previously Presented) The telecommunication system of claim 8, wherein the message requesting connection set-up is an IAM message according to ISUP signalling.

17. (Previously Presented) The telecommunication system of claim 8, wherein the reply message to the connection set-up message is an ANM message according to ISUP signalling.